FIRE MANAGEMENT

by Jeff Deitch

Forest fires rarely concern city governments, but in Palo Alto, California, they pose a burning municipal problem. Palo Alto is a San Francisco suburb of 56,000, reaching from San Francisco Bay westward into the Santa Cruz Mountains in California's Coastal Range. The city's 8,000 acres of mountain forests, brush and grasslands clearly require different fire prevention and control methods than its main residential and commercial areas.

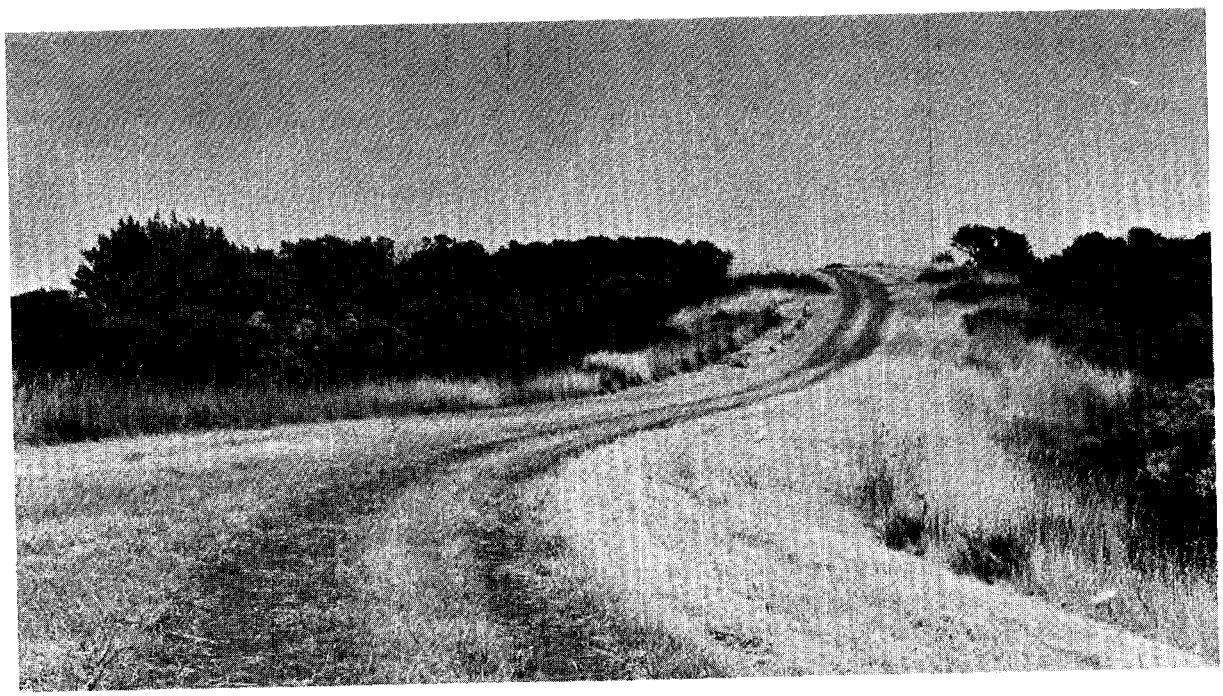
To meet these additional needs, the city government has developed the Open Space Fire Management Program, an organized effort to minimize the hazards of forest fires by dealing with the special characteristics of a natural open space area. The program's emphasis is on comprehensive fire management, supplemented by conventional methods of fire suppression. It requires the close cooperation of Fire Department and Parks and Open Space Department personnel.

The program began in 1973 in Foothills Park, a 1500-acre city-administered nature preserve with facilities for camping and picnicking. Although the park has not suffered a major fire in over 50 years, it is constantly vulnerable to wildfires, especially during the area's tinder-dry summers.

Prior to the program's inception the primary fire control method in the park involved fire breaks, a series of bare strips of earth gouged out of the landscape intended to impede the spread of a wildfire. After several years of use, the breaks proved unsatisfactory due to the extensive erosion they cause. Developers of the Fire Management Program rejected fire breaks in favor of these fire control methods:

(1) *Fuel breaks:* These are wide strips of land on

A typical fire break (center, in the distance) which caused erosion and scarring of the landscape. *(Photo by Larry White)*



Fire break in the process of being converted into a fuel break. *(Photo by Larry White)*

which vegetation has been permanently modified to be lower growing, less dense and more fire resistant than surrounding brush.

(2) *Grasslands adaptation:* This involves cultivating native-type perennial grasses similar to those that existed in the region before the arrival of the Spanish explorers. Annual grasses (which the Spanish introduced to the area) can provide fuel for late summer fires; replacement with perennial grasses helps to reduce the fire hazard potential.

Parks and Open Space Director Larry White said the fuel breaks and perennial grasses have served their intended purpose. "We're on our way toward shortening the fire season, without risking massive erosion," he said. "This winter the park had 36 inches of rain, but suffered no erosion at all." White added that the fuel breaks have also benefited wildlife by providing them "a new smorgasbord of vegetation."

White said the program will soon take on additional aspects, including: (1) The use of prescribed burning. This is the practice of setting fires in selected places under controlled conditions in order to eliminate excessive brush and trees which could fuel a wildfire. It involves the application of fire under prescribed conditions of weather and vegetation moisture. (2) Development of specific ordinances and codes to enforce fire management practices on private property. One such practice is greenbelting, i.e., surrounding private structures with native plants which can resist flames and absorb radiant heat. (3) Establishment of public information and education programs which would allay fears about prescribed burning and gain public cooperation in implementing greenbelting and other wildfire control measures. (4) Coordinating efforts with neighboring districts to establish a regional fire management plan.

Palo Alto's Open Space Fire Management Program is an unusual municipal endeavor which puts special demands on administrators as well as fire fighters. Nevertheless, in a city with more redwoods than restaurants, it's a necessary response to an uncommon responsibility.

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